

GASTRIC STIMULATOR APPARATUS
AND METHOD FOR INSTALLING

ABSTRACT OF THE DISCLOSURE

5 Apparatus for stimulating neuromuscular tissue of the
gastrointestinal tract and methods for installing the apparatus to the
neuromuscular tissue. The pulse generator is provided with a switching
matrix, and may stimulate the tissue in a time-varying manner by selecting
pairs of electrodes and altering the polarities thereof while stimulating the
10 tissue. In addition, a real-time clock allowing a trigger for on and off
modes, the time clock could also allow for a trigger to change parameters.
Such parameters that could be changed are pulse width, amplitude, duty
cycle (amount of time of pulse and time between pulses, or series of pulses),
frequency, polarity, choice of unipolar versus bi-polar, and electrode on-off.
15 The electrical stimulation utilizes a plurality of electrodes connected to at
least one organ in the gastrointestinal tract of a patient along a peristaltic
flow path with each of the electrodes being connected at a different location
along the peristaltic flow path. Electrical pulses are provided to the organ
from a first set of the plurality of electrodes and second electrical pulses are
20 provided to the organ from a second set of electrodes. The electrical pulses
provided are in an independent non-phased relationship for maintaining
therapeutic regulation of peristaltic flow through the at least one organ in
the gastrointestinal tract while defeating the body's natural tendency for
adaption.